

the same account.

In the Specification

Please amend the paragraph located in column 14, lines 47 to 51 in the original patent, as follows:

B. A solution of trans-1,1,1-trifluoro-4-phenyl-3-buten-2-one (5 mmol) and 4-sulfamylphenyl hydrazine hydrochloride (6 mmol) was subjected to Procedure 3. The title compound was obtained in 73% yield, m.p. 178-180° C.; C, H analysis (C₁₈H₁₅SO₂N₄F₃·H₂O):

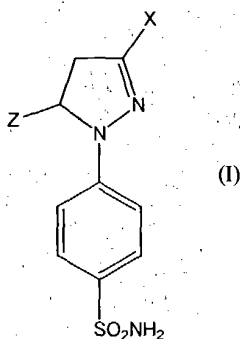
Please amend the paragraph located in column 15, lines 50 to 54 in the original patent, as follows:

B. A solution of trans-1,1,1-trifluoro-4-(3-indolyl)-3-buten-2-one (5 mmol) and 4-sulfamylphenyl hydrazine hydrochloride (6 mmol) was subjected to Procedure 3. The title compound was obtained in 82% yield, m.p. 138-140° C.; C, H analysis (C₁₆H₁₄SO₂N₄F₃):

In the Claims:

Please cancel claims 8 and 26. Please rewrite claims 1, 3, 6, 79, 13, 24, 27, 30, 34, 35, 36, 37, 38, 39, and 40 as follows. Please add claims 48-54 as follows.

1. (Amended) A compound of the formula I:



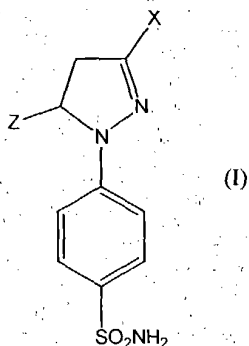
wherein:

X is [selected from the group consisting of] trihalomethyl [and C₁-C₆ alkyl]; and

Z is selected from the group consisting of substituted and unsubstituted aryl other than substituted and unsubstituted phenyl; or a pharmaceutically acceptable salt thereof.

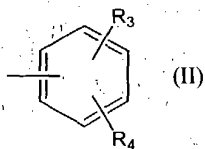
3. (Amended) A compound according to claim 2 wherein Z is selected from the group consisting of substituted and unsubstituted indolyl, furyl, thienyl, pyridyl, benzofuryl, benzothienyl, imidazolyl, pyrazolyl, thiazolyl, [benzothazolyl] benzothiazolyl, quinoliny, and 4-(2-benzyloxazolyl); or a pharmaceutically acceptable salt thereof.

6. (Amended) A compound of the formula I:



wherein:

X is a group of formula II:



wherein:

R₃ and R₄ are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; carboxy; C₁-C₆ trihaloalkyl; and cyano;

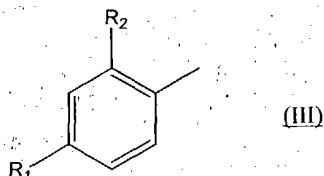
Z is selected from the group consisting of substituted and unsubstituted heteroaryl; phenyl which is mono-substituted with hydroxyl, nitro or carboxy; di-substituted phenyl; and tri-substituted phenyl; [aryl, and]

provided when Z is heteroaryl, it is selected from the group consisting of substituted and unsubstituted pyridyl, furyl, indolyl, benzothienyl, benzofuryl, imidazolyl, pyrazolyl, 2-thiazolyl, quinolinyl and 4-(2-benzyloxazolyl);

or a pharmaceutically acceptable salt thereof.

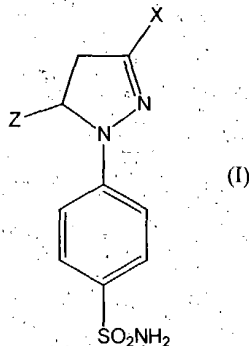
7. (Amended) A compound according to claim 6 wherein Z is selected from the group consisting of [unsubstituted phenyl; and]mono-, di- and tri-substituted phenyl.

9. (Amended) A compound according to claim [10] 6 wherein Z is the group



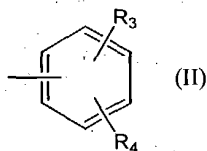
wherein R₁ and R₂ are independently selected from the group consisting of [hydrogen,] fluorine, bromine, chlorine, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl and nitro; or a pharmaceutically acceptable salt thereof.

13. (Amended) A compound of the formula I:



wherein:

X is a group of formula II:

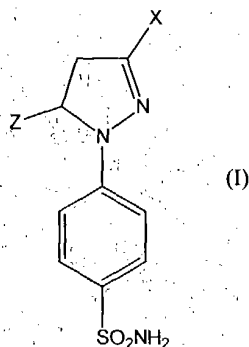


wherein:

R₃ and R₄ are independently selected from the group consisting of hydrogen, C₁-C₆ alkyl and C₁-C₆ alkoxy;

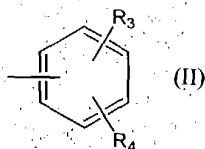
Z is selected from the group consisting of [phenyl;] phenyl monosubstituted with [halogen,] hydroxyl, nitro or carboxy; disubstituted phenyl; trisubstituted phenyl; and heteroaryl selected from the group consisting of substituted and unsubstituted pyridyl, furyl, indolyl, benzothienyl, benzofuryl, imidazolyl, pyrazolyl, 2-thiazolyl, quinoliny and 4-(2-benzyloxazolyl); or a pharmaceutically acceptable salt thereof.

24. (Amended) A method for producing a compound of formula I



wherein:

the group X is [selected from the group consisting of] trihalomethyl[, C₁-C₆ alkyl, and a radical of formula II:



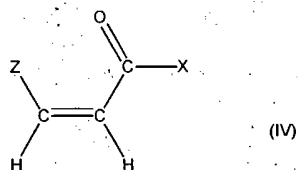
wherein:

wherein R₃ and R₄ are independently selected from the group consisting of hydrogen, halogen, hydroxyl, nitro, C₁-C₆ alkyl, C₁-C₆ alkoxy; carboxy; C₁-C₆ trihaloalkyl; and cyano]; and

Z is selected from the group consisting of substituted and unsubstituted aryl, other than substituted and unsubstituted phenyl;

the method comprising:

(a) reacting a compound of the formula IV

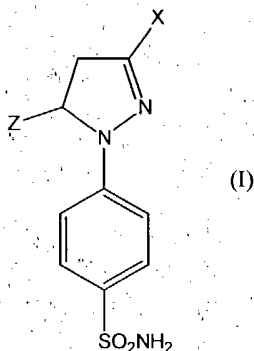


wherein X and Z are so defined;

with 4-sulfamyl phenyl hydrazine or a salt thereof; and

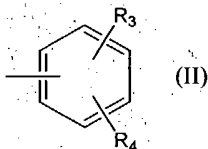
(b) isolating a compound according to formula I from the reaction products.

27. (Amended) A method for producing a compound of formula I



wherein:

the group X is a radical of formula II:



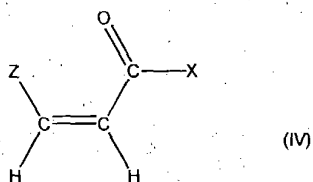
wherein:

wherein R₃ and R₄ are independently selected from the group consisting of hydrogen, halogen, hydroxyl, nitro, C₁-C₆ alkyl, C₁-C₆ alkoxy; carboxy; C₁-C₆ trihaloalkyl; and cyano; and

Z is selected from the group consisting of substituted and unsubstituted [aryl] heteroaryl; phenyl, which is mono-substituted with hydroxyl, nitro, or carboxy; di-substituted phenyl, and tri-substituted phenyl;

the method comprising:

(a) reacting a compound of the formula IV

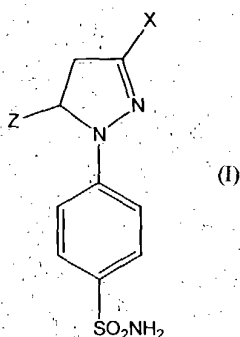


wherein X and Z are so defined;

with 4-sulfamyl phenyl hydrazine or salt thereof; and

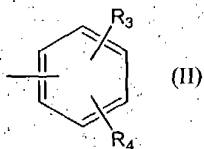
(b) isolating a compound according to formula I from the reaction products.

30. (Amended) An isolated optical isomer of a compound of the formula I:



wherein:

X is [selected from the group consisting of trihalomethyl, C₁-C₆ alkyl, and] a group of formula II:

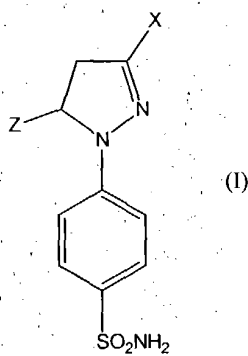


wherein:

R₃ and R₄ are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; C₁-C₆ alkyl; C₁-C₆ alkoxy; carboxy; C₁-C₆ trihaloalkyl; and cyano;

Z is selected from the group consisting of substituted and unsubstituted aryl; or a pharmaceutically acceptable salt thereof.

34. (Amended) A method for treating a cyclooxygenase-mediated disorder comprising administering to a patient in need of such treatment an effective amount of a compound according to [claim 1] formula I:

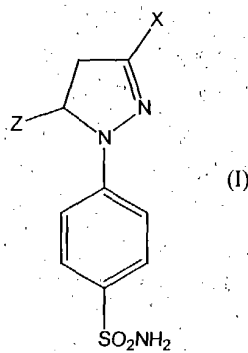


wherein:

X is selected from the group consisting of trihalomethyl and C₁-C₆ alkyl;

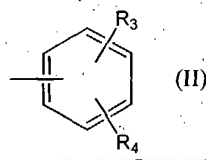
Z is selected from the group consisting of substituted and unsubstituted aryl other than substituted and unsubstituted phenyl; or a pharmaceutically acceptable salt thereof.

35. (Amended) A method for treating a cyclooxygenase-mediated disorder comprising administering to a subject in need of such treatment an effective amount of a compound according to [claim 6] formula I:



wherein:

X is a group of formula II:

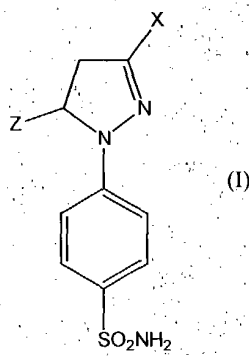


wherein:

R₃ and R₄ are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; carboxy; C₁-C₆ trihaloalkyl; and cyano;

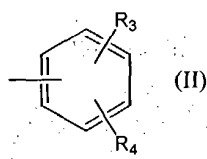
Z is selected from the group consisting of substituted and unsubstituted aryl, and when Z is heteroaryl, it is selected from the group consisting of substituted and unsubstituted pyridyl, furyl, indolyl, benzothienyl, benzofuryl, imidazolyl, pyrazolyl, 2-thiazolyl, quinolinyl and 4-(2-benzylloxazolyl); or a pharmaceutically acceptable salt thereof.

36. (Amended) A method for treating a cyclooxygenase-mediated disorder comprising administering to a subject in need of such treatment an effective amount of a compound according to [claim 13] formula I:



wherein:

X is a group of formula II:



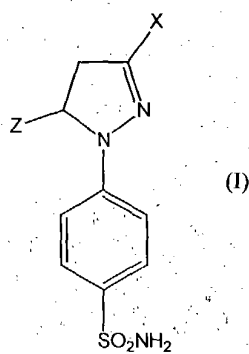
wherein:

R₃ and R₄ are independently selected from the group consisting of hydrogen, C₁-C₆ alkyl and C₁-C₆ alkoxy;

Z is selected from the group consisting of phenyl; phenyl monosubstituted with halogen, hydroxyl, nitro or carboxy; disubstituted phenyl; trisubstituted phenyl; and heteroaryl selected from the group consisting of substituted and unsubstituted pyridyl,

furyl, indolyl, benzothienyl, benzofuryl, imidazolyl, pyrazolyl, 2-thiazolyl, quinolinyl and 4-(2-benzyloxazolyl); or a pharmaceutically acceptable salt thereof.

37. (Amended) A method for treating inflammation or an inflammation-mediated disorder comprising administering to a subject in need of such treatment an effective amount of a compound according to [claim 1] formula I:

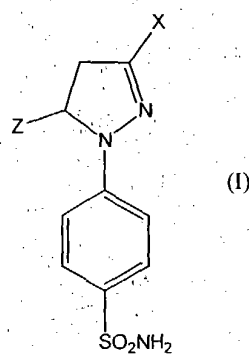


wherein:

X is selected from the group consisting of trihalomethyl and C₁-C₆ alkyl;

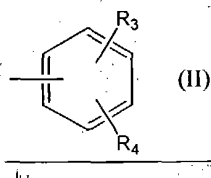
Z is selected from the group consisting of substituted and unsubstituted aryl other than substituted and unsubstituted phenyl; or a pharmaceutically acceptable salt thereof.

38. (Amended) A method for treating inflammation or an inflammation-mediated disorder comprising administering to a subject in need of such treatment an effective amount of a compound according to [claim 6] formula I:



wherein:

X is a group of formula II:

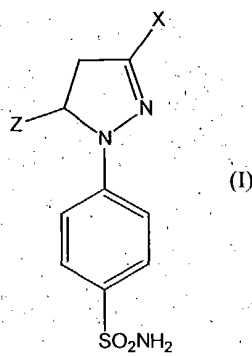


wherein:

R₃ and R₄ are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; carboxy; C₁-C₆ trihaloalkyl; and cyano;

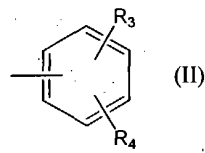
Z is selected from the group consisting of substituted and unsubstituted aryl, and when Z is heteroaryl, it is selected from the group consisting of substituted and unsubstituted pyridyl, furyl, indolyl, benzothienyl, benzofuryl, imidazolyl, pyrazolyl, 2-thiazolyl, quinolinyl and 4-(2-benzyloxazolyl); or a pharmaceutically acceptable salt thereof.

39. (Amended) A method for treating inflammation or an inflammation-mediated disorder comprising administering to a subject in need of such treatment an effective amount of a compound according to [claim 13] formula I:



wherein:

X is a group of formula II:

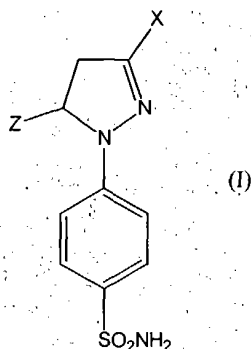


wherein:

R₃ and R₄ are independently selected from the group consisting of hydrogen, C₁-C₆ alkyl and C₁-C₆ alkoxy;

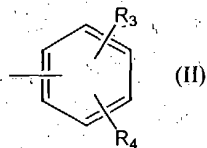
Z is selected from the group consisting of phenyl; phenyl monosubstituted with halogen, hydroxyl, nitro or carboxy; disubstituted phenyl; trisubstituted phenyl; and heteroaryl selected from the group consisting of substituted and unsubstituted pyridyl, furyl, indolyl, benzothienyl, benzofuryl, imidazolyl, pyrazolyl, 2-thiazolyl, quinolinyl and 4-(2-benzyloxazolyl); or a pharmaceutically acceptable salt thereof.

40. (Amended) A method for treating a neoplasia comprising administering to a subject in need of such treatment an effective amount of a compound of the formula I



wherein:

X is selected from the group consisting of trihalomethyl, C₁-C₆ alkyl, and a group of formula II:



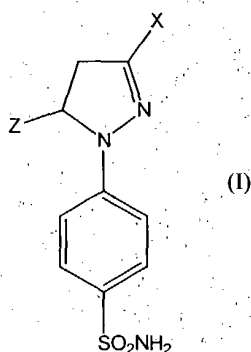
wherein:

R₃ and R₄ are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; C₁-C₆ alkyl; C₁-C₆ alkoxy; carboxy; C₁-C₆ trihaloalkyl; and cyano;

Z is selected from the group consisting of substituted and unsubstituted [aryl] heteroaryl; phenyl, mono- or di-substituted with hydroxyl, nitro, or carboxy; and tri-substituted phenyl;

or a pharmaceutically acceptable salt thereof.

48. (New) A compound of the formula I:



wherein:

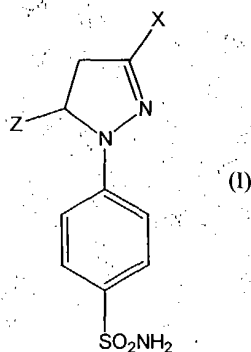
X is C₁-C₆ alkyl; and

Z is selected from the group consisting of substituted and unsubstituted aryl other than substituted and unsubstituted phenyl;

provided when Z is heteroaryl, it is selected from the group consisting of substituted and unsubstituted pyridyl, indolyl, benzothienyl, benzofuryl, imidazolyl, pyrazolyl, 2-thiazolyl, quinolinyl and 4-(2-benzylloxazolyl);

or a pharmaceutically acceptable salt thereof.

49. (New) A method for producing a compound of formula I



wherein:

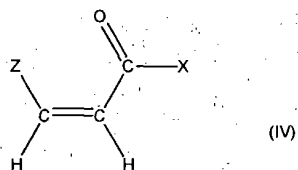
the group X is C₁-C₆ alkyl; and

Z is selected from the group consisting of substituted and unsubstituted aryl, other than substituted and unsubstituted phenyl;

provided when Z is heteroaryl, it is selected from the group consisting of substituted and unsubstituted pyridyl, indolyl, benzothienyl, benzofuryl, imidazolyl, pyrazolyl, 2-thiazolyl, quinolinyl and 4-(2-benzylloxazolyl);

the method comprising:

(a) reacting a compound of the formula IV

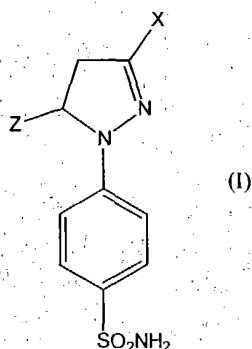


wherein X and Z are so defined;

with 4-sulfamyl phenyl hydrazine or a salt thereof; and

(b) isolating a compound according to formula I from the reaction products.

50. (New) An isolated optical isomer of a compound of the formula I:



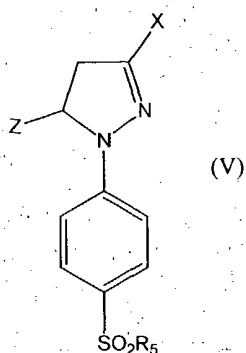
wherein:

X is selected from the group consisting of trihalomethyl and C₁-C₆ alkyl;

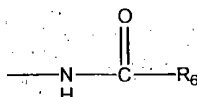
Z is selected from the group consisting of substituted and unsubstituted heteroaryl; phenyl, mono- or di-substituted with hydroxyl, nitro, or carboxy; and tri-substituted phenyl;

or a pharmaceutically acceptable salt thereof.

51. (New) A method for producing a compound of formula V

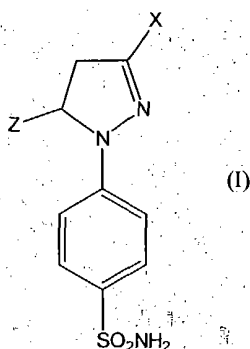


wherein R_5 is

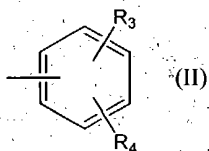


wherein R_6 is C_1 - C_6 alkyl; or a pharmaceutically acceptable salt thereof; the method comprising:

(a) reacting a compound of formula I:



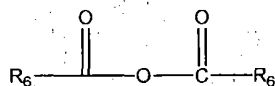
wherein X is selected from the group consisting of trihalomethyl, C_1 - C_6 alkyl and a group of the formula II:



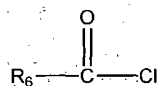
wherein: R_3 and R_4 are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; C_1 - C_6 alkyl; C_1 - C_6 alkoxy; carboxy; C_1 - C_6 trihaloalkyl; and cyano; and

Z is substituted or unsubstituted heteroaryl;

with an anhydride of the formula:

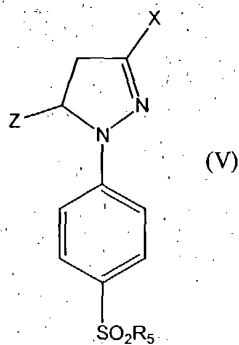


or an acylating compound of the formula

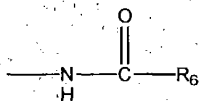


wherein R_6 is $\text{C}_1\text{-C}_6$ alkyl.

52. (New) A method for producing a compound of formula V

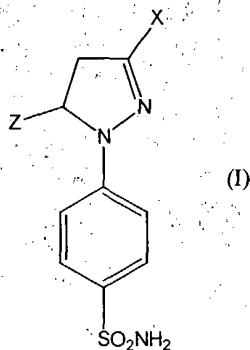


wherein R_5 is

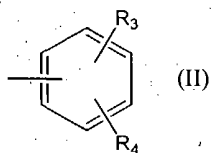


wherein R_6 is $\text{C}_1\text{-C}_6$ alkyl; or a pharmaceutically acceptable salt thereof; the method comprising:

(a) reacting a compound of formula I:



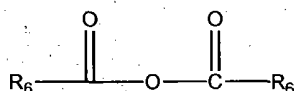
wherein X is a group of the formula II:



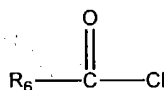
wherein: R_3 and R_4 are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; C_1 - C_6 alkyl; C_1 - C_6 alkoxy; carboxy; C_1 - C_6 trihaloalkyl; and cyano; and

Z is substituted or unsubstituted aryl;

with an anhydride of the formula:

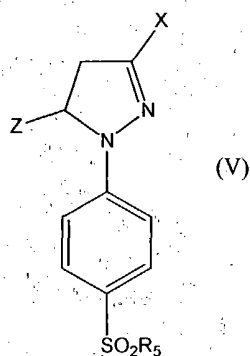


or an acylating compound of the formula

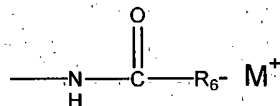


wherein R_6 is C_1 - C_6 alkyl.

53. (New) A method for producing a compound of formula V

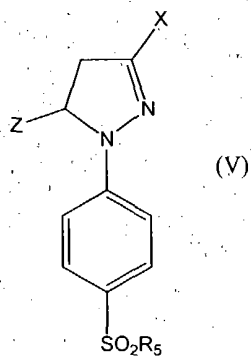


wherein R_5 is

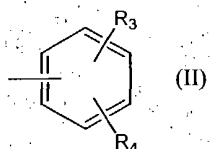


wherein R_6 is C_1 - C_6 alkyl and M is Na, K or Li; or a pharmaceutically acceptable salt thereof; the method comprising:

(a) reacting a compound of formula I:

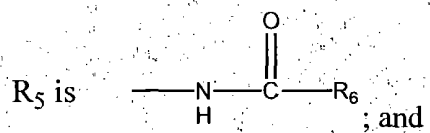


wherein X is selected from the group consisting of trihalomethyl, C₁-C₆ alkyl and a group of the formula II:



wherein: R₃ and R₄ are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; C₁-C₆ alkyl; C₁-C₆ alkoxy; carboxy; C₁-C₆ trihaloalkyl; and cyano; and

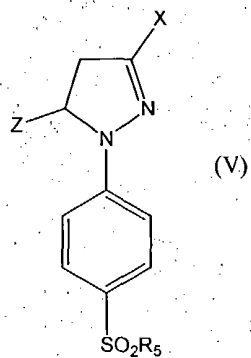
Z is substituted or unsubstituted heteroaryl; and



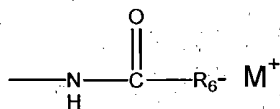
wherein R₆ is as defined above,

with an alkali hydroxide selected from the group consisting of NaOH, KOH and LiOH.

54. (New) A method for producing a compound of formula V

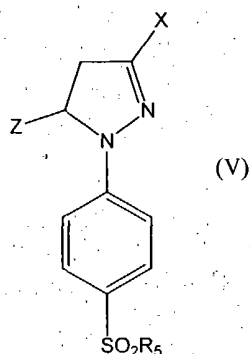


wherein R_5 is

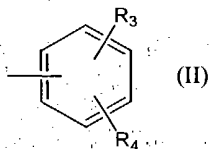


wherein R_6 is C_1 - C_6 alkyl and M is Na, K or Li; or a pharmaceutically acceptable salt thereof; the method comprising:

(a) reacting a compound of formula I:

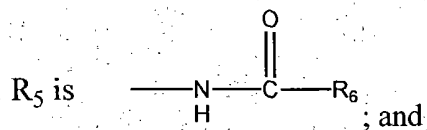


wherein X is a group of the formula II:



wherein: R_3 and R_4 are independently selected from the group consisting of hydrogen; halogen; hydroxyl; nitro; C_1 - C_6 alkyl; C_1 - C_6 alkoxy; carboxy; C_1 - C_6 trihaloalkyl; and cyano; and

Z is substituted or unsubstituted aryl; and



wherein R_6 is as defined above,

with an alkali hydroxide selected from the group consisting of NaOH, KOH and LiOH.